

SYSTEM AND METHOD FOR ADAPTIVE BRAKE APPLICATION AND
INITIAL SKID DETECTION

ABSTRACT OF THE DISCLOSURE

The adaptive brake application and initial skid detection system allows rapid brake application and prevents deep initial skids. Brake torque is compared with a predetermined threshold brake torque. Wheel velocity error signals are also generated to indicated the difference between the wheel velocity and a reference
5 velocity signal. A torque bias modulator integrator responsive to brake torque signals adjusts the wheel velocity error signals to provide an anti-skid control signal. The torque bias modulator integrator can also be initialized to the value of the measured brake torque when the wheel velocity error signals indicate the beginning of a skid. Brake torque difference signals are generated to indicate the difference between brake
10 torque and a commanded brake torque, and an adjusted brake torque error signal is generated in response to the brake torque difference signals.